

REMARKS

Claims 1-16 are pending in this application. New claim 16 has been added. In this Response, Applicants have provided remarks that explain some of the differences between the present invention and the reference cited by the Examiner. In light of the deficiencies of this reference, Applicants submit that the present application is in condition for allowance.

THE REJECTIONS UNDER 35 U.S.C. § 102

At page 4 of the Office Action, the Examiner rejected claims 1-15 under 35 U.S.C. § 102(e) based on U.S. Patent No. 6,345,272 to Witkowski *et al.* (“Witkowski”). Applicants submit that Witkowski does not teach the present invention for at least the reasons that follow.

Witkowski discloses a method and apparatus for rewriting aggregate queries to access a materialized view under certain predetermined conditions. *See* Abstract. It is often desirable to access information from a database, which may store data in data containers, referred to as tables. *See* Col. 1, lines 11-20. For various reasons, it may not be desirable to allow a user to access all of the columns of a table. *See* Col. 1, lines 28-37. Instead, a user may be allowed to indirectly access the appropriate columns of a table through a “view.” *Id.* A drawback of a view, however, is that it presents data that is extracted or derived from existing tables. *See* Col. 1, lines 38-44. Since the data presented by a conventional view is gathered and derived in response to a specific query, it is not stored after the query accessing the view has been processed. *See* Col. 1, lines 54-63. This method of processing views can become time and cost prohibitive. *Id.*

To overcome this disadvantage, skilled artisans use materialized views. *See* Col. 1, line 64 - Col. 2, line 6. A materialized view is a view for which a copy of the view data is stored separately from the existing tables from which the data was originally gathered and derived. *Id.* An advantage of a materialized view is that they eliminate the overhead associated with gathering and deriving the view data every time a query accesses the view. *Id.*

FIG. 2 graphically illustrates the ability to rewrite a query such that it accesses a materialized view. *See* Col. 3, line 66 - Col. 4, line 6. In FIG. 2, an aggregate query 210 requests summary information from sales table 250 using the SQL command “SUM \$AMT.” *See* Col. 4, lines 7-16. The figure also shows a query that defines a materialized view 270. *See* Col. 4, lines 17-18. The material view query uses the *same command* “SUM \$AMT” as in the aggregate query

210, but represents it using a different name, *e.g.*, “Sum_Sales.” *See* FIG. 2. Thus, FIG. 2 illustrates the two types of queries described above: (i) a query that requests information from a existing table in a database; and (ii) a query that generates a materialized view. In addition, FIG. 2 shows query 280, which represents query 210 *rewritten* to access the materialized view *instead of* the original data from the database. *See* Col. 4, lines 24-30. Again, query 210 is *rewritten* as query 280. Therefore, query 280 does not join two sets of aggregated data. Rather, there is only a single aggregation defined by “SUM \$AMT.” “SUM \$AMT” is *the same as* “SUM_Sales,” however the latter is the representation of “SUM \$AMT” in the materialized view. Consequently, query 280 is not joining any aggregated sets of data. Rather, it is merely a rewritten query that accesses the materialized view instead of the existing data in the database.

The present invention, however, generates a second query adapted to cause the database to aggregate the data within each of the plurality of detail tables as required. Moreover, the present invention performs a SQL join operation to join the aggregated data from each of the plurality of detail tables, the joined aggregated data representing the selected data. At least because of the deficiencies described above, Applicants submit that the Examiner has failed to prove that Witkowski anticipates the present invention, *i.e.*, Witkowski does not teach each and every element of the present invention recited in independent claims 1 and 9. As such, Applicants submit that the Examiner’s rejections under 35 U.S.C. § 102(e) have been overcome. Reconsideration and allowance of the pending claims is respectfully requested.


CONCLUSION

All claims are believed to be in condition for allowance. If the Examiner believes that the present amendments and remarks still do not resolve all of the issues regarding patentability of the pending claims, Applicants invite the Examiner to contact the undersigned agent to discuss any remaining issues.

A Petition for Extension of Time is submitted herewith extending the time for response three months to and including September 29, 2006. No other fees are believed to be due at this time. Should any fee be required, however, please charge such fee to Bingham McCutchen LLP Deposit Account No. 195127, Order No. 19111.0045.

Respectfully submitted,
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Dated: September 29, 2006

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